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ABSTRACT

A two-part report, sponsored by the Northwest Regional Exchange, focuses on the role of technical assistance in educational settings. This document, part II of the report, examines selected change models for establishing technical assistance systems and implications for action. After a brief introduction, the following critical components of technical assistance are discussed: (1) needs assessment (including the problem solving cycle), (2) talent banks (which match clients' skills with those of technical assistance consultants), (3) written agreements, and (4) guidelines for achieving mutual trust and respect. Thereafter, a series of illustrative models for organizational change, resource acquisition, dissemination, and diffusion are presented and discussed. Finally, implications of the data for action are discussed, including establishing criteria for professional behavior as a consultant, evaluating the effectiveness of the technical assistance process, and using a technical assistance consultant effectively. A bibliography is included, along with four illustrative appendixes: (1) a technical assistance written agreement, (2) a list of critical decisions in six phases, (3) steps in developing a change model, and (4) a guide to use of symbols in model building. (TE)

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Research Summary Report

PROVIDING EFFECTIVE TECHNICAL ASSISTANCE IN EDUCATIONAL SETTINGS

Part II: Implementing the Research:

The Effective Delivery of Technical Assistance

by Leslie Crohn

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
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August 1984

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PREFACE

During the past three years, the Northwest Regional Exchange has sponsored the development of focused research reports whose topics have been identified by members of the Northwest Regional Exchange Advisory Board representing the states of Oregon, Alaska, Hawaii, Washington, Montana, Idaho and the Commonwealth of the Northern Mariana Islands. We have found the development of these reports to be an effective dissemination strategy that effectively and efficiently moves the research knowledge base to the user level.

Each report is in response to state-defined information needs and is intended to influence the improvement of practice. In each case, a specific knowledge base, anchored in research and development, is analyzed and synthesized. The process is more telescopic than broadly comprehensive in nature. Elements of careful selectivity and professional judgment come into play as authors examine the information against the backdrops of current state needs, directions, and/or interests. As a result, research-based implications and recommendations for action emerge that are targeted to the region.

This particular report is in response to a common regional need and has been designed in two parts. As each state carefully examines the emerging knowledge bases in such topical areas as effective schooling, instructional leadership, organizational development, and futures/trends, it becomes obvious that the roles and functions of state and district level personnel must be analyzed and realigned to support school-based change. This research report, in two parts, addresses the role and

function of technical assistance in educational settings. Part I, A Research Synthesis, explores technical assistance as a process as well as the consulting roles that relate to it. Part II, Implementing the Research: The Effective Delivery of Technical Assistance, examines selected change models for establishing technical assistance systems and implications for action. The reader may find Part I useful in acquiring some basic understandings about technical assistance. Part II, on the other hand, contains a variety of models and techniques that can be used as tools for restructuring existing technical assistance systems and roles or, if appropriate, establishing new systems and roles so that they most effectively support school-based improvement efforts.

J. T. Pascarelli
August, 1984

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ABSTRACT

Currently, there is rapid growth in the number of technical assistance organizations serving educational settings:

> A technical assistance system is most properly viewed as a communications network. It is a temporary and constantly changing organization in which members initiate and maintain communication concerning specific problems and solution strategies. Everything in the technical assistance system is directed toward the initiation and maintenance of this communication. Its structure and function is partly determined by the content or information the system is appointed to deliver, partly by the characteristics of the "customers" or client organizations, and partly by the character and style of the membership of the technical assistance organization (Stedman 1980).

Based on this description of technical assistance systems as complex communications networks, a literature search was initiated to help determine specific aspects of effective technical assistance systems or organizations. Two separate studies resulted from our inquiry. Part I: "A Research Synthesis," presents an overview of major research and literature findings, including the extant knowledge base and the state-of-the-art in technical assistance. Part II: "Implementing the Research: The Effective Delivery of Technical Assistance," is more process-oriented; that is, it sequentially specifies the steps found to be effective in the successful delivery of technical assistance.

Following are the primary purposes which guided our study of effective technical assistance programs and processes:

- To synthesize recent literature and research findings

- To provide educational personnel involved in delivering technical assistance services to clients with comprehensive knowledge and background related to effective technical assistance

- To enhance and improve the capacities of those involved in technical assistance programs so they may work more efficiently and effectively with colleagues

- To provide educational personnel with appropriate information so they may make better use of technical assistance services

Both Part I and Part II of the study serve a variety of audiences including consultants, organizational development specialists, disseminators, linking agents, change agents and others currently involved in the delivery of technical assistance. In addition, both parts of the study also serve the following groups:

- Persons who are currently planning for or participating in technical assistance or in-service activities, including trainers, participants, continuing education personnel and managers/administrators

- Persons who are involved in graduate training activities including personnel in educational administration, special education, adult and continuing education and educational technology

- Persons who wish to know more about technical assistance systems and how they operate

It is our intent to present, in two parts, a synthesis of the literature and research findings regarding effective technical assistance models, processes and strategies. Additionally, in Part II, we offer a set of finite recommendations to move the findings toward implementation to help those involved in technical assistance programs to provide more effective communications networks and ultimately, better serve their client organizations. For as Ekendahl (1979) points out, the overarching goal of consultation (i.e., technical assistance) is to bring about change for the better.

I. INTRODUCTION

Part I of the study of effective technical assistance systems and organizations looked at the extant knowledge base and offered a synthesis of the research and literature findings. Included in the discussion in Part I were the following components of technical assistance (TA):

- Communications and the phenomenology of change
- Definitions of key terms
- The goals of technical assistance
- Consultants* as change agents
- The roles of the broker and funding agent
- An historical perspective of technical assistance including ad hoc consultation and new organizational designs
- The state-of-the-art in technical assistance

*Note: The term "consultants" is used throughout this study to designate those persons involved in the delivery of technical assistance. Such persons may hold any number of titles including organizational development specialists, disseminators, linking agents, change agents and others.

In Part II of the study, we move the literature and research findings to the implementation level by offering a sequential progression of steps necessary to achieve successful delivery of technical assistance.

Specifically, in this part, we look at the following critical components which are inherent and necessary to the achievement of effective technical assistance:

1) Needs assessment including the problem solving cycle

2) Use of a talent bank

3) Written agreements

4) Mutual trust and respect

Additionally, we present and discuss a series of illustrative models for organizational change, resource acquisition, dissemination and diffusion. And finally, we delineate the implications of the data for action including establishing criteria for professional behavior as a consultant, evaluating the effectiveness of the technical assistance process and using a technical assistance consultant effectively.

II. ESSENTIAL ELEMENTS OF TECHNICAL ASSISTANCE

Needs Assessment

Before new knowledge or skills can be effectively delivered, a comprehensive needs assessment of the clients' situation must be initiated. Needs assessment means a deliberate and sustained attempt is made to understand the clients' total circumstances and specific requirements. It means time has been taken to listen to the clients' description of the problem as opposed to applying already developed solutions. Such initial efforts also serve to develop mutual trust and credibility. A thorough needs assessment is a form of emotional communication; it is a key element to any process undertaken to help people. Gallagher (1980) compares this type of emotional communication to psychotherapy where analysts say nothing meaningful happens to clients until some kind of transference takes place: "I am convinced that in education some analogous kind of transference must take place between the client and the transmitter of information and skills (TA agent) before there can be any sizable modification or change in the client" (Gallagher 1980).

Problem solving is inherent to the needs assessment phase (Havelock 1971, 1973). Once the need has been determined from the assessments, it is translated into a statement of the "problem," followed by detailed analysis of the causes. The client and consultant then generate ideas, information and resources that could lead toward possible solutions. The client "tries out" the innovations generated in collaboration with the consultant in terms of their effectiveness in satisfying the needs.

Problem solving is a critical component of Havelock's (1973) model of technical assistance: Gallagher (1980), in reviewing Havelock's model, makes the following observation:

> This problem solving orientation of the model is useful because it stresses the client's needs, a collaborative diagnosis of the problem, and a somewhat nondirective approach on the part of the TA system. These are important qualities of the TA/client relationship. Isolating a problem or a set of problems is also helpful in formulating concrete goals and objectives for TA. Furthermore, limits can be set on the duration and scope of the TA/client system relationship as a result of how the problem is defined.

Havelock (1973) suggests that the focus of the problem solving orientation must be on the client, the client's needs and the innovations considered to satisfy those needs.

This problem solving orientation means the role of the person delivering the technical assistance will be consultative or collaborative; the role may also be either content-oriented (assisting the client in solving problems by providing new ideas and innovations) or process-oriented (guiding the client through the problem solving phase).

In guiding the clients through the problem solving cycle, the consultant must determine if his or her perception of the clients' problem is accurate through close personal interaction and feedback. Additionally, the consultant must determine if the assistance provided has been effective and acceptable in relation to the stated needs. Meanwhile, close personal interaction will afford the client opportunities to learn from the TA events provided, including how to use the problem solving

process, how to search for new ideas and innovations and how to develop planning and evaluation techniques. Ultimately, the entire TA process should result in the installation of capacity within the client system--helping the clients solve their own problems and becoming more efficient users of TA systems in the future.

The consultant/client relationship is cyclical; that is, the TA process evolves from a series of interrelated consultant/client interactions (Gallagher 1980):

> The number of interactions depends upon the goals and objectives of the assistance, the degree of client satisfaction/dissatisfaction at each stage of the cycle, and the organizational, legal and financial constraints on the relationship. Each TA interaction sequence (cycle) exists within the context of past interactions--this is especially important to remember when taking into consideration the perceived successes or failures of past TA...

An important element of the problem solving process is the time dimension; the consultant must maintain flexibility so as to provide assistance at just the right time. To respond too early or too late can be ineffective. Clients will be more successful in implementing and sustaining change when they are appropriately prepared and ready to do so.

Before actually designing a viable needs assessment strategy, including a problem solving component, the consultant must carefully consider some critical issues. Black (1980) presents a set of questions that provide an overview of the major practical concerns:

1) <u>What are the basic purposes of a technical assistance needs assessment?</u>

There are three major purposes for a TA needs assessment: a) to

identify the clients' needs, b) to develop a plan for satisfying those needs and c) to develop mutual trust between the consultant and the client.

2) Whose needs are being assessed?

At the onset, it is important to identify who the client organization is and the precise number of clients to be served. Sometimes this is obvious; other times such information needs to be determined by the consultant so that appropriate resources to conduct an accurate and realistic needs assessment can be projected and allocated. (For example, will all teachers in a district be involved or just a select group?)

3) Are the client programs basically new programs, or established programs?

Newly funded or created programs will necessitate an emphasis on planning and priority setting; well-established programs will require more of a program review structure, including the determination of strengths, weaknesses and future plans. A mix of new and established programs means the consultant will provide both planning and review services; two separate needs assessments may also be in order in such cases.

4) How broad and diverse are the goal structures of the client organization?

Narrow, well-defined goals are an indication that the consultant can probably design a focused and well-structured needs assessment. However, clients with diverse and broad-based goals probably indicates that the consultant will have to design a process for needs assessment that is open and flexible.

5) How is the content developed for the needs assessment?

Instruments and questionnaires used for needs assessment purposes must be developed in accordance with any federal, state and local regulations, standards and guidelines that the client must meet. There also may be published standards or guidelines prepared by professional organizations that relate to the client's goals. Human resources must be considered--a panel consisting of field experts, representatives from the funding agency and representatives from the client organization may be brought together to provide input.

6) Do the clients have a choice in participating in needs assessment?

Required participation may mean that some clients will feel resentful toward the process; in this case, the consultant will have to work to overcome such reluctance. Voluntary participation often means that the consultant will have to convince the clients that the needs assessment is worth their time and effort.

7) Which staff members should participate?

Every organization has key staff members whose involvement is critical to the success of any new venture. Knowing who key staff are and assessing their availability will help drive the needs assessment process. At this point, it's necessary for the consultant to determine staff timelines, responsibilities and schedules. The organizational hierarchy must also be considered

as approval or permission from supervisors will most likely be in order.

8) Who should conduct the needs assessment?

The consultant may elect to conduct the needs assessment in any number of configurations: a) using TA staff exclusively, b) hiring and training consultants, c) using a single individual, d) using teams, e) using only staff from the client organization or any other combination. Decisions made by the consultant regarding which persons will have responsibility for needs assessment will be based on the number, size and abilities of both the TA organization and the client organization as well as available resources.

9) How should the needs assessment be conducted?

Alternatives include: a) through the mail, b) by telephone, c) via group meeting, d) on-site, or e) any combination of these. There are advantages and disadvantages of each. Telephone and mail systems may be cost effective, especially when the client group is very large; however, they most likely will not result in mutual trust and respect. Group meetings allow for sharing of information and ideas but usually lack the complete participation of all staff members from the client organization. On-site needs assessments have the advantage of individualization and full participation of client staff in addition to building positive relationships. However, on-site needs assessments can be expensive in terms of both time and money.

10) To what extent should the needs assessment process be a TA service in and of itself?

A comprehensive and in-depth needs assessment can be a valuable TA service to clients before any of the needs are directly addressed. Needs assessment can assist clients in a better understanding of their program as well as open up new program areas for development. Thus, clients should be urged to look at needs assessment as an important component of the TA service rather than as a necessary burden in order to get help later.

11) How much time will the needs assessment take?

Decisions regarding time frames will be made based on the amount of time both the consultant and the client can afford to spend and are willing to invest. Time limitations may require the use of additional consultants to supplement the TA staff, especially in cases of on-site needs assessment.

12) What preparation is necessary before conducting the needs assessment?

Preparation activities are an integral part of the needs assessment process. Client staff to be involved must be made completely familiar with the needs assessment design, the purposes, the resources and materials to be used and the role of the consultant. If observation activities are to occur, the consultant will have to make arrangements for adequate time and opportunities for observation. Preparation activities include the gathering of any written materials available on the client program so the consultant can become familiar with them.

On-site needs assessments will require advance phone calls in order to get acquainted and confirm arrangements and expectations.

13) What happens after the needs assessment?

The needs assessment process is an initial step in the delivery of service; how and when the consultant plans to proceed next should be carefully communicated to the client. At this point, it is necessary to guard against building false expectations about what is going to happen and how soon it will happen. Mutual trust and respect can be severely damaged by promising too much too soon. However, the delivery of service to the client should begin as quickly as possible after the needs assessment when clients are primed, ready and clear about goals. Since needs and priorities can change over time, quick turnaround from needs assessment to delivery of service helps to guarantee that the technical assistance is on target.

14) How will the needs assessment process be evaluated?

Plans for evaluation will be developed as a part of the needs assessment design. The evaluation plan will involve the collection of data from both the client and the consultant and will serve to refine and improve the process of technical assistance.

15) Who will see the needs assessment data and how will it be used?

The consultant has responsibility for carefully developing organizational policies concerning what information is shared and with whom; those policies must then be rigorously maintained.

Talent Bank

A second factor, after needs assessment, which will help overcome difficulties associated with ad hoc consultation efforts and new organizational designs (discussed in Part I) is the use of talent banks. Talent banks serve to match clients' skills with TA skills, by drawing on available human resources such as curriculum developers, legal professionals, medical personnel, evaluators, counselors and so on. This range of consultants in a talent bank needs to be readily available to help the client solve problems or satisfy needs. Utilizing a talent bank means the consultant does not have to become the instant "expert." Since client needs require a broad spectrum of skills and talents to satisfy those needs, the consultant can call on the individual(s) who precisely match those requirements.

Stedman (1973) suggests that consultants in a talent bank can provide support services in three functional areas. Stedman labeled his "educational bucket brigade" as dippers, shuttlers and throwers. The dippers are those persons who synthesize the literature, research findings and knowledge base and then translate that knowledge so it is useful and applicable to the client. The shuttlers are those who transmit the knowledge to the place where it is to be applied and the throwers do the actual inserting of knowledge into a client system. Though the three roles are distinct, Stedman believes they do not require three seperate individuals. What is required is a thorough understanding of the functions of each role and the types of skills and training consultants in the talent bank require to be effective. The proven importance of personal contact with clients suggests that training in personal dynamics is especially necessary for consultants to be effective.

Other practical considerations in choosing consultants from a talent bank and matching to clients' needs include the following (Trohanis et al. 1981):

1) Geography

Do the consultant and client share common geographic locations? Residence within the same state or region and geopolitical/cultural similarities are important considerations. Preliminary research, albeit limited, in rural schools suggests that such institutions are best served by consultants from rural areas. Some initial research also suggests that the same holds true for urban clients. Perhaps the most important geographic consideration in selecting a consultant from a talent bank is financial; transportation and travel costs continue to escalate. Funds allocated for such expenses can often be better utilized for increased TA time by employing consultants within close proximity to the client.

2) Type of Agency

It's important that the client and consultant share the same agency familiarity; most especially, the consultant, to be effective, must be familiar with the clients' language, politics, cultural characteristics and technology.

3) Previous Experience

Information regarding the consultant's past experiences with clients who had similar needs is helpful in making the client/consultant match. Also helpful in selecting a consultant is the situation in which the talent bank candidate has

experienced the same need as the client; for example, a director of a multicultural learning center can often be a good choice as consultant to a novice director.

4) Preselection

If clients know in advance who they want to work with, that choice should be honored after the consultant has been screened.

5) Compatability of Professional Philosophy

Humanists often prefer to work with humanists; behaviorists usually prefer to work with behaviorists. Clients who have strong commitments to schools of thought or preferred modes of collaboration should be matched to consultants with similar commitments.

6) Consultant Style

Compatibility between styles is another consideration when matching a consultant with a client. A process-oriented person will most likely function more effectively with other process-oriented professionals. To be avoided, for example, are high-powered, task-oriented consultants with low-key, people-centered clients, unless such a match is specifically desired or requested.

7) Ethnicity/Language Sensitivity

The predominate language and cultural characteristics of the client need to be considered in making the consultant/client match. Especially important are any special client sensitivities that must be considered. For example, a client

that serves a Pacific Islander group may request a consultant who is fluent in the Chamorro language and is sensitive to the Pacific Island cultural heritage.

8) Interest

The consultant being considered for delivery of service must be willing to give his or her best effort and have commitment to the project. Consultants with already hectic schedules might find it difficult to fit in additional pieces of work. Stress can result when already heavy schedules are made heavier. The most effective consultants view the clients' needs as equal to any of the work already on their professional agendas.

9) Availability

The most desirable consultants are those with adequate time to schedule and conduct the TA. Continuous rescheduling is disappointing to everyone involved.

Written Agreements

A third element to help the TA process overcome past difficulties is the written agreement. It is crucial to the success of any TA effort that a written agreement be drawn between the TA provider and the client. Such an agreement serves the following purposes: 1) it delineates a clearly specified set of objectives, 2) it establishes a time frame, 3) it specifies the amount of assistance to be delivered, 4) it builds in accountability, and 5) it is a record as to the agreed-upon parameters for the assistance.

Written agreements are the end result of the negotiation process which is at the core of any TA effort. The negotiation process serves to match the client's need with appropriate delivery strategies, timing, intensity and place of delivery (Wiegerink and Bruninghaus 1980). The process of negotiation between the consultant and the client determines the match between needs and services. Therefore, a carefully monitored negotiation period is needed in every TA effort as both the consultant and the client have goals, objectives and needs that can lead to incompatibility (Wiegerink and Bruninghaus 1980). The negotiation process: 1) defines what is needed, 2) determines timing and 3) develops mutual understanding as to the purpose of the assistance. The end result of the negotiation process is the written agreement which delineates the following (Wiegerink and Bruninghaus 1980):

1) What the technical assistance is and when and how it is to be delivered and by whom
2) What all parties will do and when they will do it
3) What the TA provider will do and produce
4) What the client will do to set the stage for the assistance
5) What the client will do to receive and evaluate the assistance
6) What the TA provider will do to assure monitoring and accountability of performance

Wiegerink and Bruninghaus (1980) describe the importance of the written agreement:

> A written agreement is important for a number of reasons. First, it requires all parties to work out a strategy for assistance which is logical and rational and makes sense on paper. Second, this process of committing ideas to paper can refine the notions developed by the brainstorming sessions into

a statement of measurable outcomes; evaluation can therefore be much more effective and useful. Third, the written agreement provides a blueprint for action which cannot be denied at a later time, and in that sense, it has the same value as a contract.

Thus, a written agreement specifies both needs and services to be provided to the client. It includes expectations, responsibilities and timelines for both the TA provider and the client organization. An example of a TA written agreement is given in Appendix A.

Mutual Trust and Respect

The fourth factor following needs assessment, use of a talent bank and written agreements is mutual trust. This element is perhaps the most critical, yet also the most difficult to achieve. It has already been shown that personal contact is more likely to result in increased and sustained change in clients. Such face-to-face contact is vital to the establishment of mutual trust and respect. Argyris (1970), in looking at the element of trust between client and innovator in industry, offered the following guidelines: 1) the consultant must pay close attention to the client's stated needs, 2) the consultant must give precedence to the client's priority of problems, 3) the consultant must follow through on requests for service with sustained, personal contact. This strategy reflects Havelock's findings (1971) in looking at change agent models. Havelock found the following characteristics of one type of helping model to be those most often associated with technical assistance (1971):

- The client is the starting place.
- Diagnosis precedes solution identification.
- The outside helping role is nondirective.

- Internal resources are important.
- Client initiated change is the strongest.

Gallagher (1980) suggests three principles of communication are basic to achieving mutual trust and respect in any TA effort:

1) Communication for change works best when the client who is requesting change, or who is expected to change, has a major say in the nature of the change itself.

2) Communication for change works best when there is a common language between the consultant and the client.

3) Communication for change works best when the message does not contradict the basic values of the client.

Lippitt and Lippitt (1978) have formulated a check list of critical decisions that consultants typically face in each of six consultative phases (Appendix B). Consultants who can objectively and honestly provide adequate responses to the questions will, most likely, also build strong foundations of mutual trust and respect.

In the next chapter, we look at the usefulness of models in designing TA systems and offer some illustrative examples.

III. DELIVERING EFFECTIVE TECHNICAL ASSISTANCE

The Use of Models

The consultant has primary interest in finding ways to confront the complex problems of the client as well as the forces involved in change. Any technical assistance effort necessitates levels of change on the part of the client organization as was clearly established and validated by research in Part I. Therefore, to have any impact on the system which is receiving the technical assistance, the consultant must be well-versed and skilled in the change process. In this section, we explore the use of models to plan, initiate, implement and evaluate change in client behaviors, including the individual, the group and the organization. The effective use of models can help consultants to cope with the complex problems of the educational society (Lippitt 1973):

> Basically, a model is a symbolic representation of the various aspects of a complex event or situation, and their interrelationships. A model is by nature a simplification and thus may or may not include all the variables. It should include, however, all of those variables which the model-builder considers important and, in this sense, models serve as an aid to understanding the event or situation being studied. The true value of a model lies in the fact that it is an abstraction of reality that can be useful for analytical purposes. In a way, models are analogies which problem solvers use to clarify their thinking about a relatively complex presentation.

In preparing for technical assistance, consultants visualize what will happen and then work to accomplish what they envision. By relating present TA experiences to their prior visualization, consultants are able to improve future TA efforts. Looked at another way, the behavior of effective consultants relies not only on what is happening now but also

on the visual representation of what is going to happen later. To do so means that the assistance goes beyond what is happening at any given moment; it is also a continous process that is continuously corrected by feedback. Such visual representations of TA efforts are clearly aligned to the use of models (Beer 1966):

> Let us call this mental representation of the world that is not a direct perception of the world a model of the world. The term is appropriate; models of things may be more or less accurate; and thereby better or worse able to predict the behavior of what is modeled. Just because they are predictive, models are open to experimentation as a means of evaluating the likely performance of the thing modeled.

Therefore, any model is valuable when it improves our understanding of a system and its characteristics more than would be possible by observing it. In this respect, a model can quickly present a picture of conditions not observable in real life.

A model is almost always an abstraction of a real-life thing or process; it is usually a representation of objects, events, processes or systems. When employing models for use in the change process, we can manipulate the model variables to test the impact of a proposed plan or strategy for change. Modeling is a way to help: 1) analyze the forces for and against the intended change, 2) synthesize the available data and 3) provide opportunities for those involved to understand the ramifications of the contemplated change. Therefore, the functions of the model include (Pino and Emory 1977):

1) Representation

   A model can be used to represent a complex situation and to provide a means for making changes in it. It may also be used to uncover new relationships between variables.

2) Guidance

A model inherently provides rules or guidelines for dealing with situational variables. It can illustrate manipulative constraints and the interdependence of variables.

3) Interpretation

A model can be used to interpret and test theory and to establish a framework for experimentation and discussion.

4) Visualization

A model can be used by a researcher, change agent or teacher to visualize or illustrate change processes and activities.

5) Prediction

When experimentation is impossible or impractical, a model can be used to predict the outcome of given events or changes. Its value in this function will be determined by the extent to which the interrelationships are accurately delineated and understood.

6) Recreation

Model building can provide fun and relaxation for a change practitioner. Some people refer to it as "professional doodling," but it can be both meaningful and enjoyable.

7) Communication

Perhaps the reason communication is not usually included as an important function is because it is taken for granted. But taking it for granted instead of taking it into consideration can result in an ineffective model. A model should execute only one-way communication. There are three requisite components for one-way communications: the source (model builder), the channel (the model) and the receiver (the one directly or indirectly using the model). To be most helpful to the receiver, the message of the model should be readily understandable. It should convey the message to the receiver exactly as the model-builder intended.

In summing up the value of models for use in the change process, Pino and Emory (1977) observe:

> Models were first used to describe events, phenomena and relationships. Models were next used to explain situations and concepts. Models have been used in planned change to predict events and reactions. More recently, prescriptive models have been used to aniticipate events and their consequences. Futurists and others interested in the dynamics of change find it helpful to prescribe those actions necessary for coping with the assessment of consequences. At all levels, model building is a most helpful technological tool.

As related to the planned change process, there are advantages and disadvantages in the use of change models. Advantages include (Lippitt 1973):

1) Models allow experimentation without risk. Consultants can determine with a model the effects of a number of alternative

interventions for change without actually tampering with the system. The advantage of abstract experimentation is even more important when dealing with planned change which is primarily measured not in dollars and cents, but in human lives.

2) Models are good predictors of system behavior and performance. However, a word of caution is in order. Although models provide effective means for predicting performance and behavior characteristics of a system, they cannot be expected to predict specific conditions far enough into the future to be helpful for long-range planning of change.

3) Models promote deeper understanding of a system. Models are used as a basis for planning learning experiences and training activities. Additionally, model building can identify where and how total involvement and the learning process might be helpful in effecting change.

4) Through the use of models, the relative significance of various factors can be determined. Consultants are able to change one factor in a change model while holding all other factors constant, thus enabling the consultants to determine the sensitivity of the system to one particular factor.

5) Models indicate the types and amount of data which should be collected and analyzed. The design and study of an applicable model will reveal the need for additional information or discredit that which is at hand.

6) Models permit consolidation of the change problem as a whole. Consultants can use the models for simultaneously displaying and considering all of the selected aspects of the change problem and then in indicating which aspects might need to be overlooked or emphasized.

Disadvantages associated with the use of change models include (Lippitt 1973):

1) A model may induce one to overgeneralize a situation.

2) The temptation arises to make the situation fit the model rather than trying to fit the model to the situation.

3) The relationships between the variables in a model, or the nature of the constraints, may be incorrect or misleading, whereby the model could lead to unproductive research or conclusions.

4) A model may not be properly validated or understood. As such, some work or effort could be expended on an invalid model or certain factors may be overlooked.

5) Model-building may divert useful energy into nonproductive activity.

6) Modeling might produce oversimplification.

7) A model may have no intrinsic means of evaluation.

8) Modeling requires conceptual ability and a modest degree of sophistication, neither of which is always readily available.

Based on both advantages and disadvantages, the use of models should not be indiscriminate; the use of models is not a science nor the answer to all problem solving efforts. Most important is to keep the model simple and in workable form. In the final analysis, the validity of the change model lies in its ability to predict the results of different change interventions. If the model can do so accurately, it is a good model; if it cannot, its value probably lies in providing additional insight into the nature of the problem.

Appendix C lists the steps involved in developing a change model. Though there are no widely accepted, standardized symbols for use in creating models for change, Appendix D offers an experimental set of guidelines that may be acceptable for standard usage.

Illustrative Models for Organizational Change

Included in this section are eight illustrative models of organizational change to demonstrate their potential use and impact on the client system. Each model embodies the abstract essence of the problems to be addressed.

Following the eight organizational change models, we offer further illustrations of models that have potential for use in the client/consultant relationship:

Model #9: Resource Acquisition, Dissemination and Diffusion

Model #10: Problem-Solving Strategic Orientation

Model #11: Linking the Consultant to Clients' Resources and Remote Expert Resources

Example #1: A Model for Displaying the Elements in the Helping Process

In any individual change process, a relationship evolves between the two parties that eventually leads toward success or failure of the possibility for planned change. The consultant always enters such a relationship as a person with established experience and expertise. To be effective, it is essential that the consultant understand the nature of this power and develop the skills which will be viewed as helpful by the client organization. Real dialogue between client and consultant is necessary for the establishment of a helping relationship. A model which displays the elements in the helping process is given in Figure 1.

Example #2: A Model for Understanding An Individual's Response to Change

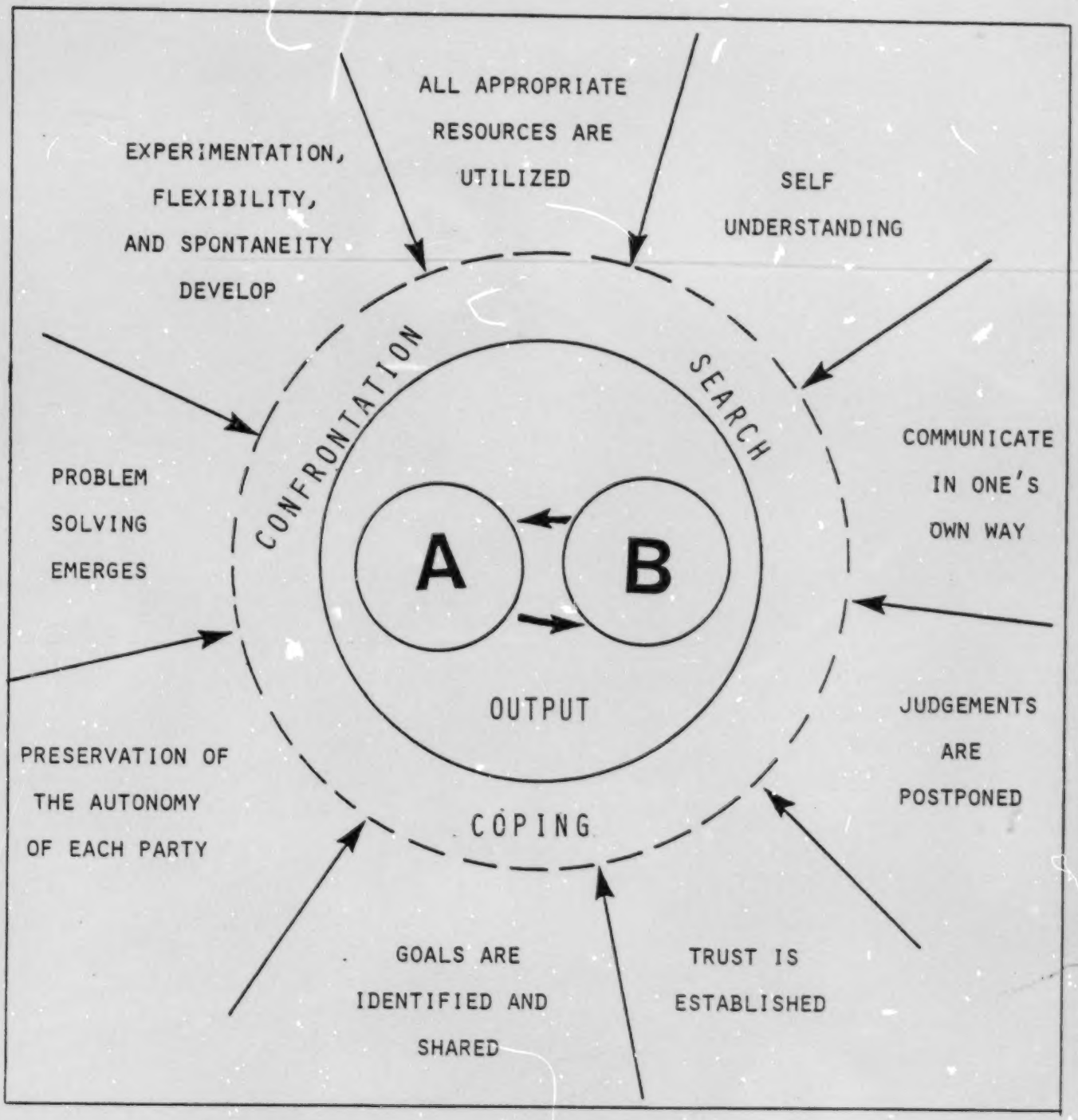
A model for understanding the impact of change on an individual is given by Warren Bennis in Figure 2. This model displays the different levels of response to change exhibited by an individual such as oppose, resist, tolerate, accept, support or embrace. Bennis suggests that the response an individual makes toward change is affected by 1) the ambiguity of change, 2) whether or not the individual can control the environment, 3) how much the individual trusts the change agent and 4) the intensity of the search behavior. Bennis suggests that these factors are influenced by 1) the availability of information regarding change, 2) the degree of psychological participation in the change by the individual and 3) the external factors.

Example #3: A Model for Understanding the Interaction of the Environment and the Organization

Organizations are dynamic, evolving and complex structures that are in synergetic relationships with their environments. The behavior exhibited in any one part is dependent, to a great extent, on what is integral to

FIGURE 1

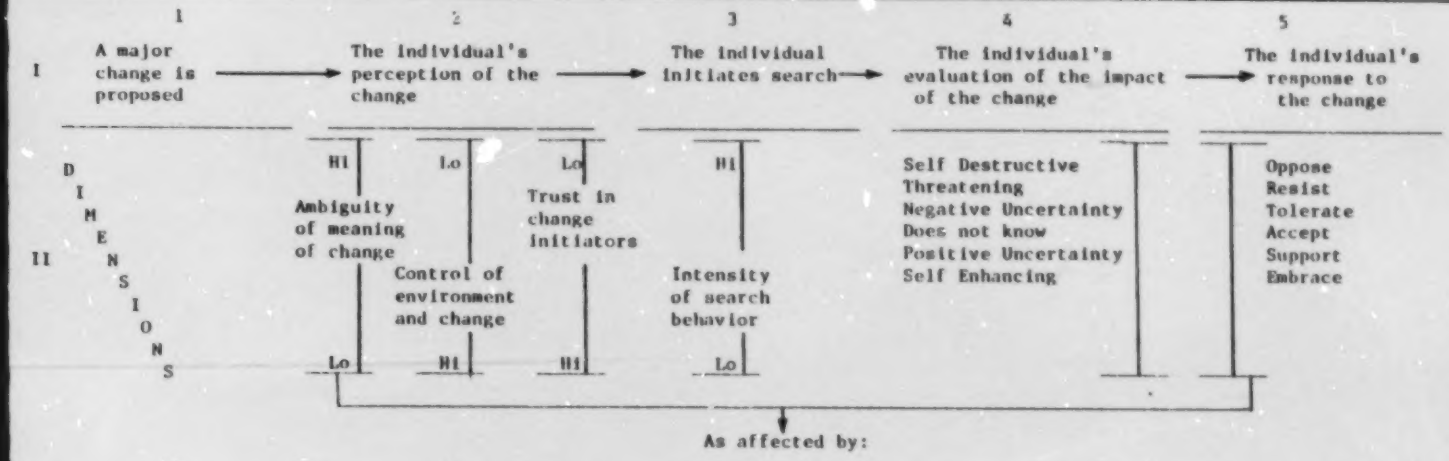
Elements in the Helping Process



SOURCE: Lippitt, Gordon L. Quest for Dialogue. Washington, D. C. Development Publications. 1966. p. 30.

FIGURE 2

Model for Understanding an Individual's Response to Change



III

a. Extent of information about change

Zero — High

A little information | Some information | Quite a bit of information | Full information

b. Extent of psychological participation in the change

Zero — High

A little influence | Some influence | Quite a bit of influence | A great deal of influence

c. Other factors such as the individual's acceptance of organization folklore and past experience with change

Zero — High

A little acceptance and experience | Some acceptance and experience | Quite a bit of acceptance and experience | A great deal of acceptance and experience

SOURCE: Bennis, Warren. In Visualizing Change. (Lippitt, Gordon L.) NTL Learning Resources. 1973.

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the other parts. Hence, the organization-environment relationship is part of the total macrosystem. An example of a model which illustrates this relationship is given in Figure 3. The model displays the interaction between the environment and the technical, economic, legal and social interchange of the organization.

Example #4: A Model for Depicting a Framework for Planned Organizational Change

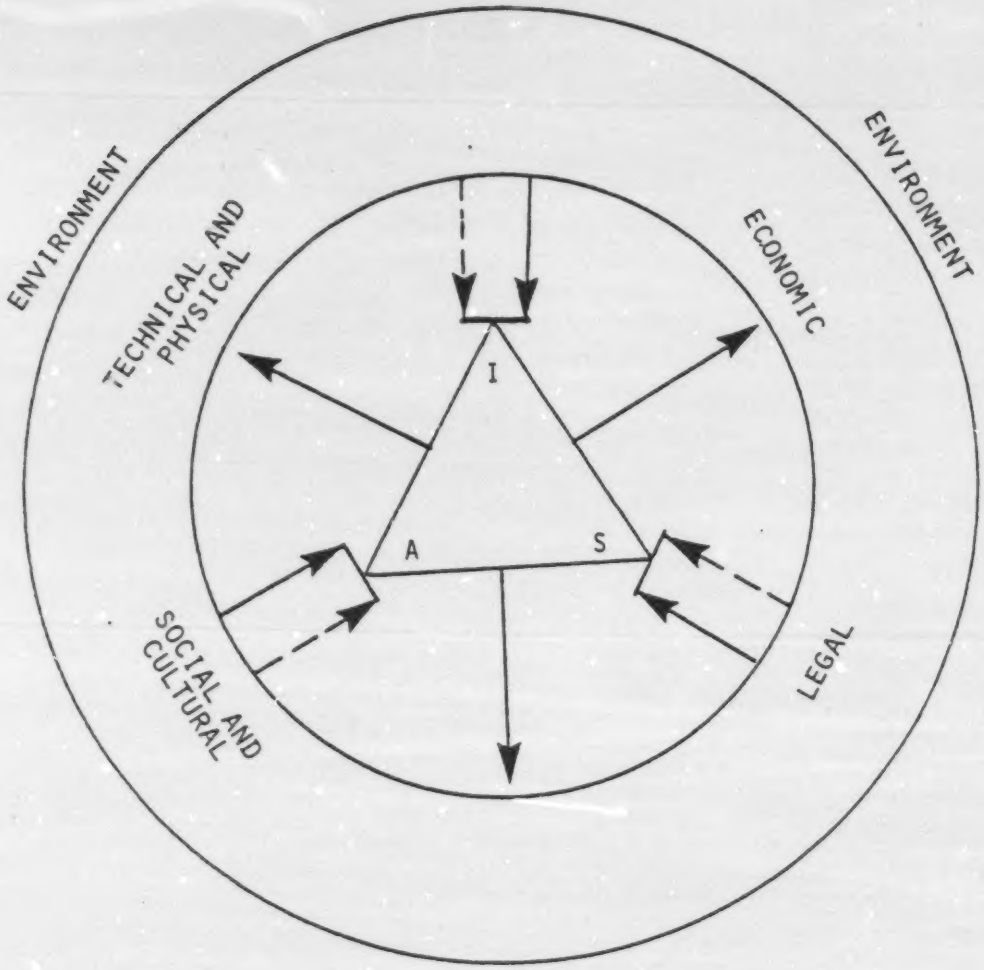
Warren Bennis (1964) has developed three approaches to organizational change--equilibrium, organic and developmental models. In the first, equilibrium, the major goal is keeping the organization free from conflict. To minimize stress and keep the functioning of the organization smooth, the consultant can use data collection, feedback, group discussion, and situational confrontation. In the second, organic, the goal is to develop team management so the organization can engage in more effective problem solving. Toward these ends, the consultant can use problem solving exercises, sensitivity training, team building and other similar approaches. The third model, developmental, has as its major goal, the establishment of genuine relationships to advance the interpersonal functioning of the organization. In this instance, the consultant can use T-groups, problem solving activities, confrontation clinics and other events to change values from efficiency and productivity to humanistic. Figure 4 illustrates Bennis' approach to planned organizational change.

Example #5: A Model Illustrating Organizational Development

Lippitt (1973) offers a different type of model for organizational change (Figure 5). He refers to the model as one of confrontation, that is, appropriate responses to situations that arise in an organization.

FIGURE 3

Interaction of the Environment and
the Organization



The diagram represents I (Interaction), A (Activity), S (Sentiment) in mutual dependence with each other and in relation to the forces of the environment. Environmental forces may have an impact upon the social system of any of the three points. The impact may come directly (solid line) or symbolically (dotted line). The outwardly pointing arrows indicate that the social system has impact upon the environment.

SOURCE: Whyte, William F. "An Interaction Approach to the Theory of Organization" in David Hampton, Charles Summer and Ross Weber. Organizational Behavior and the Practice of Management. Glenview, Illinois. Scott Foresman and Co. 1968. p. 53

FIGURE 4

Framework for Planned Organizational Change

Selected Aspects of Change Induction / CHANGE MODEL	A Mechanism for Change	B Target of Change	C Normative Goals	D Functions of Management	E Roles Of Change Agent	F Instrumentation or Programs	G Leverage for Change	A. Mechanism for change refers to ways client-system unfreezes. B. Target of change refers to locus, the effect of A.
I. EQUILIBRIUM MODEL (Soler, Jacques, Menzies, et al.	Tension release through anxiety reduction	Defensive social structures	Conflict-free ("realistic") social structures	Reality-tester	Consultant Researcher Trainer Counselor	Data-collection & feedback Group discussion "situational confrontations" Reconceptualization	Role model Identification	C. Normative goals refer to action-imperatives of change-agent. D. Functions of management refer to some key elements in the manager's role as viewed by change agent.
II. ORGANIC MODEL (Blake, Shepard, et al.	Power redistribution Conflict resolution	Problem solving activities	Team Management	Adaptation, collaboration	Trainer Teacher Consultant Researcher	Problem-solving exercises T-groups Theory (Managerial grid) 6 phase approach	"Cognitive map"; acquiring new concepts	E. Roles of change-agent are listed in order of priority. (Very rough estimate) F. Instrumentation refers to programs and techniques employed by change-agent.
III. DEVELOPMENTAL MODEL (Argyris, et al.	Transformation of values	Interpersonal competence	Authentic relationships	Develop and maintain authentic relationships	Researcher Trainer Consultant Counselor	T-groups Problem-solving activities	Valid communications New symbolic devices	G. Leverage for change refers primarily to the ways instrumentation is employed in order to manipulate A., Mechanism for change.

SOURCE: Bennis, Warren. Presented at ASTD Conference in Washington, D.C. April, 1964.

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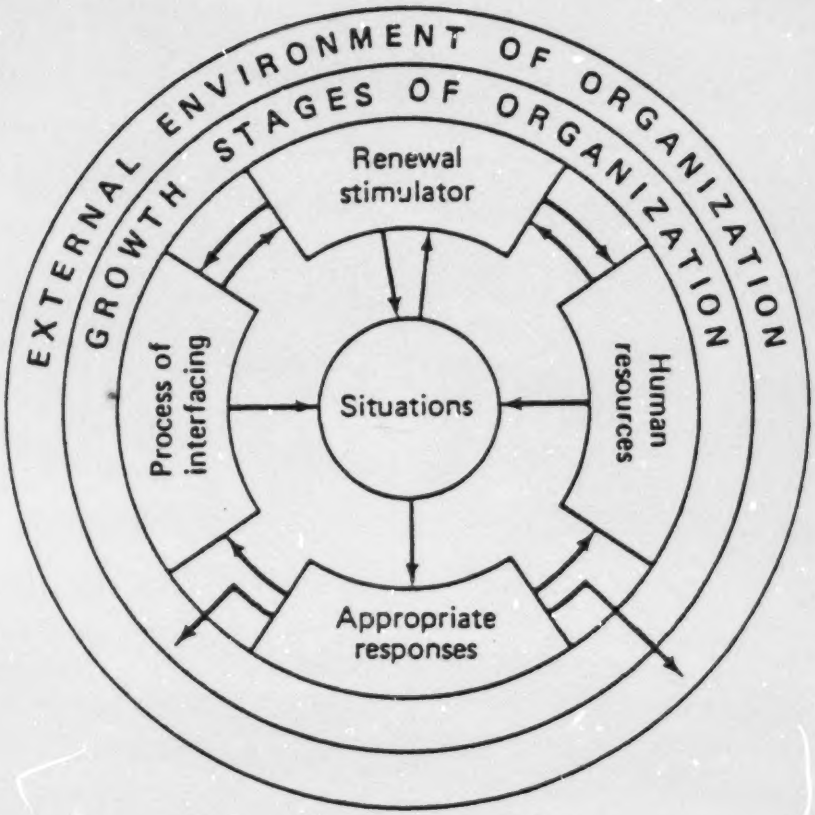
FIGURE 5

ORGANIZATION DEVELOPMENT MODEL



SOURCE: Lippitt, Gordon. Visualizing Change. NTL Learning Resources, Inc. 1973.

Lippitt suggests that in his model, "situations" are used as the focal point and include such events as problem solving, confrontation, crisis, and everyday decisions (Lippitt, 1973):

> Decisions are made with respect to situations rather than situations creating decisions. A situation is not always a problem but problems are always caused by situations. Situations will test whether individuals and groups are really able to meet many kinds of needs. It is through working on situations and examining the subsequent failures and successes that organizational systems discover the worth of their selection procedure, interfacing process, training programs, communication efforts and development activities.
>
> In this concept of Organization Renewal the key element is the ability to respond appropriately to situations. Whether the response is appropriate will depend on whether an action does the following four things:
>
> 1) Optimizes the effective utilization and development of the human resources in the organization
>
> 2) Improves the interfacing process in the organization
>
> 3) Contributes to the growth of the organization
>
> 4) Is responsive to the environment in which the organization exists

Example #6: A Model Displaying Induced Organizational Change

G. Dalton (1970) surveyed five successful organizations. His model (Figure 6) suggests that four broad phases of change and four specific subprocesses of learning are needed to reinforce the process of change. The model clearly shows that the learning process is more complex than the mere acquisition of cognitive or intellectual skills. Dalton suggests that to influence people to change their behavior requires

FIGURE 6

Dalton's Model of Induced Organizational Change
(Phases of Change)

Processes of Change	Tension Experienced Within the System	Intervention of a Prestigious Influencing Agent	Individuals Attempt to Implement the Proposed Changes	New Behaviors and Attitudes Reinforced by Achievement, Social Ties, and Internalized Values--Accompanied by Decreasing Dependence on Influencing Agent
Setting Objectives		Generalized objectives established	Growing specificity of objectives--establishment of subgoals	Achievement and resetting of specific objectives
Altering social ties	Tension within existing social ties	Prior social ties interrupted or attenuated	Formation of new alliances and relationships centering around new activities	New social ties reinforce altered behavior and attitudes
Building self-esteem	Lowered sense of self-esteem	Esteem-building on basis of agent's attention and assurance	Esteem-building based on task accomplishment	Heightened sense of self-esteem
Internalized motives for change		External motive for change (new scheme provided)	Improvisation and reality testing	Internalized motive for change

SOURCE: Dalton, G. "Influence and Organization Change." Unpublished paper. Harvard Business School. Reproduced on p. 8 of Organizational Change and Development by Dalton, Lawrence and Groiner. Richard Irwin (pub.). 1970.

influencing the self-esteem of those persons as well; organizational change has to come through individual change (Dalton 1970):

> When I say I prefer to work with individuals, I must add that I can only work with individuals in a context of the social settings in which they function. To work only with individuals, particularly where values, norms, and modes of their social settings conflict with their personal directions, I believe almost ensures that individual change is not going to occur. The greatest individual growth will occur when we can, at the same time, work with the social groupings of which the individuals are members. The two processes--individual growth and organizational growth--are interrelated and reciprocal, and must be worked more or less simultaneously. The individual versus group orientations are no longer separate.

Example #7: A Model Illustrating Organizational Change Through Shared Power

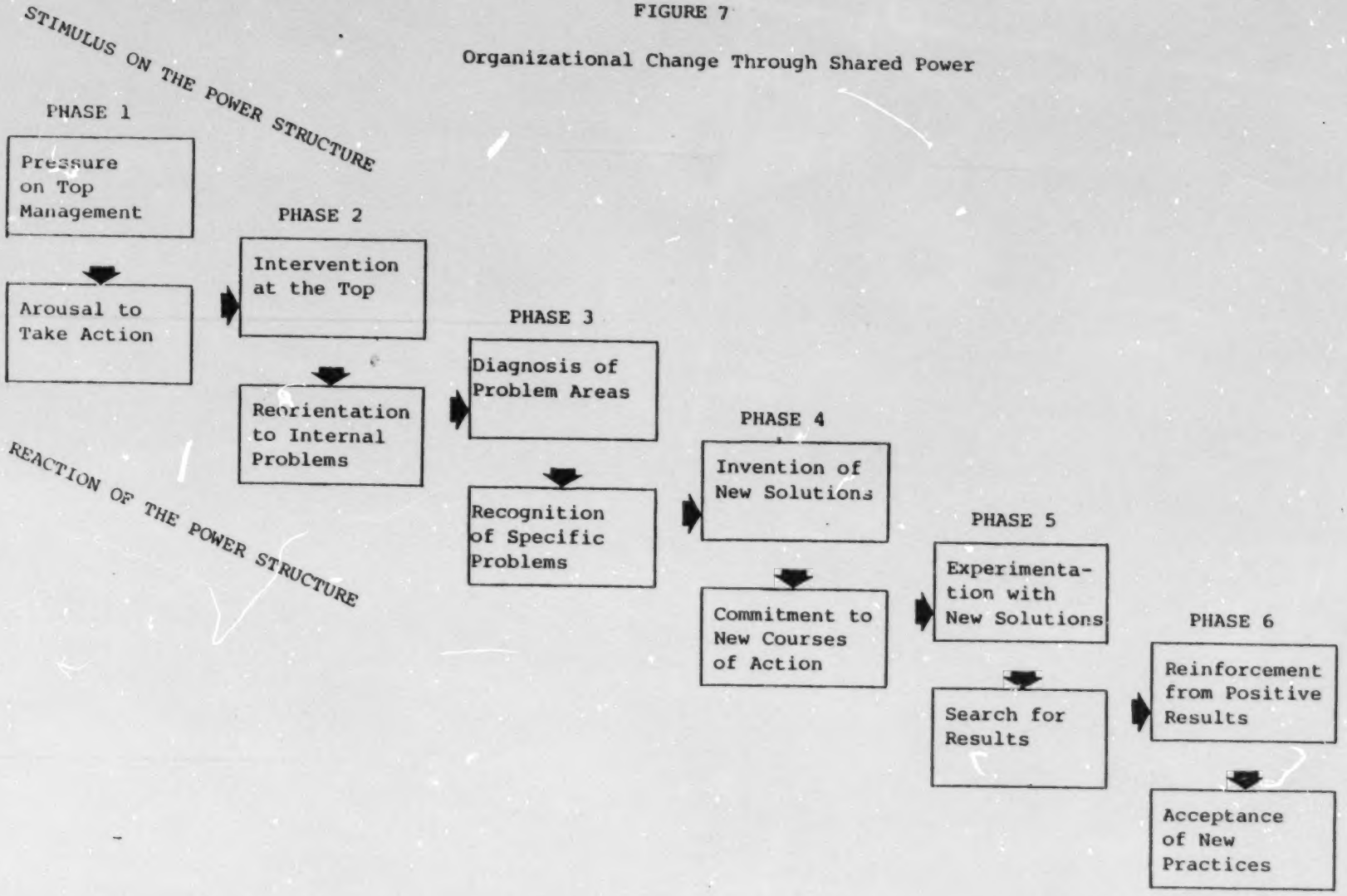
To effect organizational change requires the support of those key individuals or groups in power within the organization. Greiner (1970) surveyed a large number of organizations to determine how successful changes evolved. He found that more lasting and meaningful change comes from shared power rather than from unilateral or delegated approaches. However, for the shared approach to work effectively, a particular sequence of steps appears necessary as shown in Figure 7.

Example #8: A Model Depicting a Managerial Learning Laboratory

And finally, in looking at paradigms for organizational change, some corporations and other institutions have employed techniques of sensitivity training for their middle managers. The purpose of the sensitivity training laboratories is to help middle managers improve the organization development processes and to build team effectiveness. Figure 8 displays this model, indicating objectives established for the training.

FIGURE 7

Organizational Change Through Shared Power



SOURCE: Dalton, G. "Influence and Organization Change." Unpublished paper. Harvard Business School. Reproduced on page 8 of Organizational Change and Development by Dalton, Lawrence, and Greiner. Richard Druin (pub.). 1970.

FIGURE 8

Managerial Learning Laboratory

LEARNING LEVELS

SELF-AWARENESS LEVEL		GROUP DEVELOPMENT LEVEL		INTERGROUP ACTION LEVEL	
From	Toward	From	Toward	From	Toward
Being closed	Being open	Surface discussions	Depth discussions	Competition with other groups	Collaboration with other groups
Denying feelings	Expressing feelings	Intra-group competitiveness	Intra-group collaboration	Win/lose conflict resolution	Win/win conflict resolution
Being defensive	Accepting feedback	Guarding information	Sharing information	Destructive inter-group relationships	Helping inter-group relationships
Conventional approach	Experimental approach	Denying feelings	Expressing feelings	One-sided problem solving	Shared problem solving
Suspicion of others	Trust of others	Undercutting other members	Supporting other members	Rejecting others' points of view	Accepting others' points of view
Being guarded	Being spontaneous	Being unaware of group process	Being aware of group process	Viewing other groups as enemies	Viewing other groups as colleagues
Avoiding conflict	Facing conflict	Using few group resolution	Using all group resolution	Suspicion of other groups	Trust of other groups
Being rigid	Being flexible	Resistance or apathy to group goals	Commitment to group goals	Commitment limited to group goals	Commitment to total organization goals
Having a facade	Being Sincere	Self-enhancing behavior	Contribution to group group action		
Shallowness of perception	Depth of perception				
Distorted self-awareness	Accurate self-awareness				

MANAGERIAL BEHAVIORS

SOURCE: Behavioral Science Concepts and Management Applications. National Industrial Conference Board. p. 75.

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An Illustrative Model for Resource Acquisition, Dissemination and Diffusion

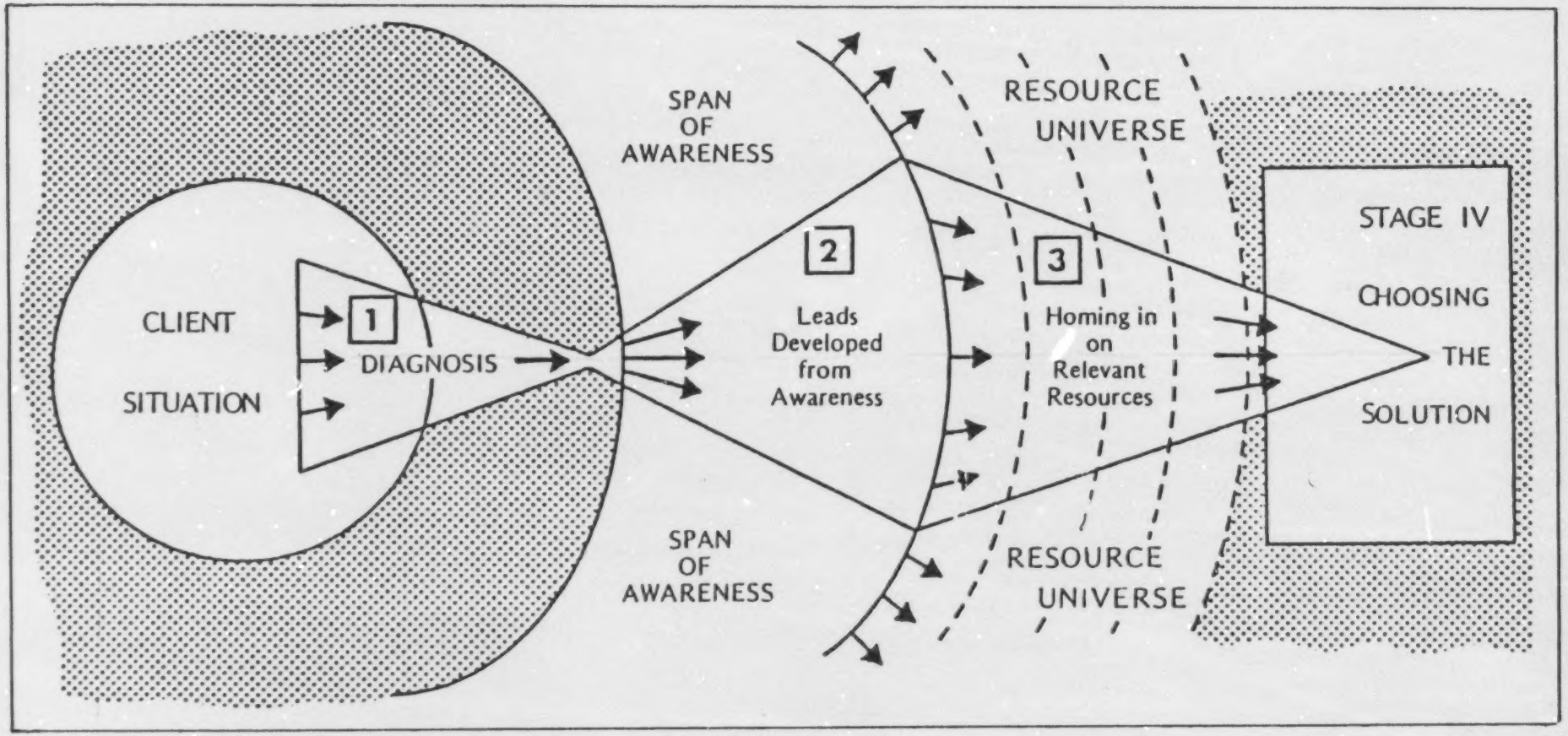
An effective consultant, to make an accurate diagnosis of the clients' needs, must acquire relevant information about the client system and about the specific problem under consideration. Figure 9 (Havelock 1973) illustrates this progression. Moving from the left, the retrieval of diagnostic information from the client leads to identification of some specific problems and a statement of objectives in behavioral terms. Such pinpointed problems help the consultant make connections with known resources (both human and material). With a variety of resources in mind, the consultant can begin to acquire appropriate items that can be used as solution alternatives.

Two Illustrative Models for Problem Solving

Problem solving, as has been demonstrated in this study, is an integral component to the needs assessment process: "Problem solving is usually seen as a patterned sequence of activities beginning with a need, sensed and articulated by the client, which is translated into a problem statement and diagnosis" (Havelock 1973). After formulating the problem statement, the client is able to conduct a meaningful search and retrieval of ideas and information to be used in formulating or selecting the innovation. Ultimately, the client needs to be concerned with adapting the innovation, trying out and evaluating its effectiveness in satisfying the original need (Havelock 1973). The focus throughout is the client, the client's needs and what the client does to satisfy those needs. The role of the person delivering the assistance at this stage is, therefore, consultative or collaborative. The consultant may help

FIGURE 9

Resource Acquisition Is a Three-Part Problem

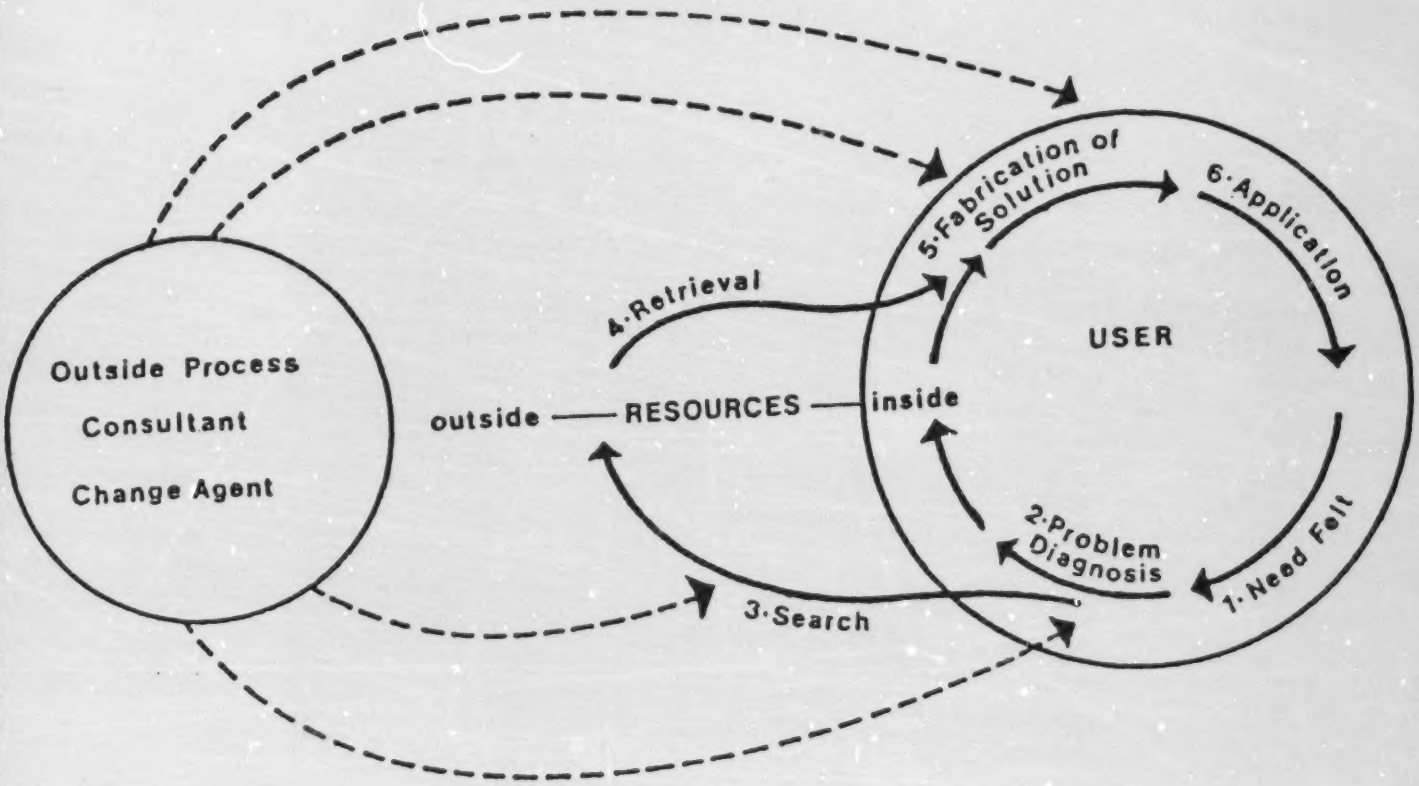


SOURCE: Havelock, Ronald. The Change Agent's Guide to Innovation in Education. New Jersey: Educational Technology Publications. 1973.

the client either by providing new ideas and innovations specific to the diagnosis or by providing guidance on the process of problem solving at any or all of the indicated stages. The model displayed in Figure 10 shows the relationship. Havelock (1973) has derived the concept of "linkage" in designing problem solving models. According to this principle, the starting point is the internal problem solving process of the client. However, the process of searching out and retrieving external resources which are relevant to the problem solving cycle are precisely delineated. Therefore, the consultant as external resource person must fully understand and have empathy for the client's internal problem solving process in order to effectively link the client with appropriate resources. The client, at the same time, must fully understand and appreciate how the resource system operates, including such activities as research development and evaluation. The consultant and client then need to provide each other with reciprocal feedback via close communication which is mutually satisfying and reinforcing. Such collaboration is likely to result in more relevant and effective solutions as well as build mutual trust and respect: "In the long run, then, initial collaborative relations build effective channels through which innovations can pass efficiently and effectively" (Havelock 1973). The model displayed in Figure 11 shows this process, linking the consultant to the client's resources as well as to more remote expert resources.

FIGURE 10

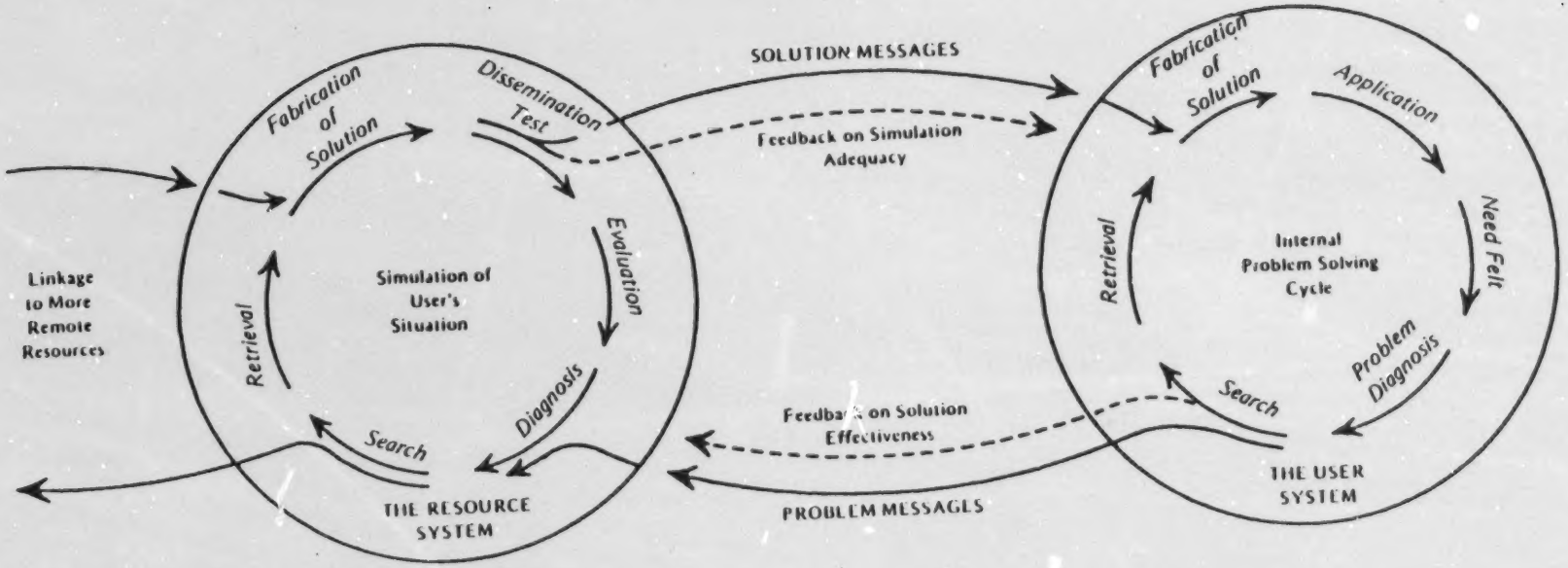
The Problem-Solver Strategic Orientation



SOURCE: Havelock, Ronald. The Change Agent's Guide to Innovation in Education. New Jersey: Educational Technology Publications. 1973.

FIGURE 11

A Linkage View of Resource-User Problem Solving



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SOURCE: Havelock, Ronald. The Change Agent's Guide to Innovation in Education. New Jersey: Educational Technology Publications. 1973.

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IV. IMPLICATIONS FOR ACTION

Establishing Criteria for Professional Behavior as a Consultant

Part I and Part II of this study looked at the role of the consultant in providing effective technical assistance in educational settings. A consultant has been defined as the person delivering service through the transfer of information and skills to the client organization. The role of this person also includes that of change agent, catalyst, solution giver, process helper and resource linker (Havelock 1973). The responsibilities and areas of expertise demonstrated by a consultant are complex and comprehensive. Most important, the consultant, as an effective planner of change, must manifest professional behavior. The behavior includes appropriate knowledge, skills and attitudes regarding the client organization and the particular needs of that organization that are being addressed. Following are some guidelines which may be helpful in establishing the criteria for professional behavior as a consultant (Lippitt 1973):

Effective Consultants:

1) Focus on the problem solving approach to learning and change, relying on data, not hunches
2) Develop interdependence with others, not dependency
3) Practice what is preached in the field of specialized knowledge
4) Diagnose situations, rather than merely treating symptoms
5) Understand themselves thoroughly and do not let personal needs get in the way of helping people and organizations
6) Communicate on a reality level in an "open" fashion

7) Admit mistakes and learn from failure

8) Develop interests and skills so as to be able to work with people in a noncontrolling manner

9) Are willing to experiment and innovate

10) Develop a personal philosophy about working toward the development of people and organizations

11) Are capable of saying, "I don't know"

12) Are willing to learn and change

To overcome unsuccessful TA efforts in the past such as ad hoc consultation and new organizational designs, this study has advocated increased personal contact, especially through the use of 1) effective needs assessment strategies, 2) talent banks, 3) written agreements, and 4) techniques to establish mutual trust and respect.

Consultants as Effective Needs Assessors

It has been demonstrated that consultants need to be thorough and effective needs assessors. This is critical to the success of any TA effort. Implications of these data for action include some additional considerations (Black 1980):

It is important that consultants as needs assessors demonstrate the following behaviors:

1) Are cautious of needs assessor bias, since trained assessors often tend to drift toward identifying needs in areas where they

have expertise

2) Are cautious of creating disillusionment in the client as needs assessors know that thorough and comprehensive needs assessments can be discouraging as they point out all the things the clients haven't done yet; therefore, effective consultants as needs assessors remain positive and reassuring through the needs assessment process
3) Remember to ask, "Is there anything else?" so something important to the project is not overlooked
4) Are thoroughly familiar with the needs assessment instrument
5) Thoroughly train any additional persons to be used as needs assessors
6) "Reality test" the needs assessment instrument and procedures by bringing in one or two of the clients to review the instrument and procedures if time allows
7) Color key the needs assessment materials to allow for efficiency
8) Respond quickly after the needs assessment to provide something useful and tangible within a few days after the visit
9) Report the overall results of the needs assessment back to the client group

Evaluating the Impact

Implementing any new program within a school or district requires considerable investment in money, time and effort. Therefore, consultants and client organizations need to evaluate the effectiveness of the program and assess whether the new program is meeting the identified needs. Evaluation helps the client organization decide

whether to continue, eliminate or expand the program. The following discussion can help the client organization work more effectively with the consultant to develop and carry out evaluation of a new program. Topics include: 1) developing evaluation criteria, 2) implementing the evaluation and 3) reporting the results.

Developing Evaluation Criteria

What the client organization wants to know about the innovation is the first practical concern. In other words, what are the really important questions for the people in this particular organization? For example, suppose the client organization is a school district. Some possible questions to be answered in developing evaluation criteria include (Ford and Hergert 1979):

- Does the program significantly improve student achievement?
- Does the program improve student attitude?
- Is the program more consistent with those that precede and follow it?
- Are teachers or parents more satisfied with the program?
- Is the program more cost effective than previous programs?

Answers to these questions will help the consultant determine which aspects of the program are most important to evaluate.

Other considerations in designing evaluation measures include who the audience is and what they will accept as evidence of effectiveness. For example, if the evaluation is meant for parents, the kinds of data collected and the reporting method used will be quite different from the data presented to teachers. Early determination of the audience makes

the evaluation easier to conduct and the report more appropriate (Ford and Hergert 1979).

Implementing the Evaluation

After determining the audience, the evaluation design needs to be formulated and implemented. Steps in this process include (Ford and Hergert 1979):

1) Develop specific outcome objectives of the program, including summative outcomes (end-of-year results) and formative outcomes (ongoing monitoring).

2) Decide how the data will be collected. Options include tests (commercially or locally developed), interview techniques, structured observation, surveying techniques, case studies, narrative reports and/or record keeping. Ultimately, the choice depends on the type of data the audience is likely to accept.

3) Develop procedures for data collection. Decide when the data will be collected and who will collect it.

4) Analyze the data, interpret findings and make recommendations regarding program continuation, modifications and so on. This analysis is dependent on the kinds of results needed, the nature of the evaluation design and the staff capabilities. If the objectives are stated in quantitative terms, the analysis can simply involve judging whether the objectives were met. In other cases, the evaluation might involve testing to determine the statistical significance of the results.

Reporting the Results

After the data are analyzed and interpretations made, a report is made to the client organization. The report should include (Ford and Hergert 1979):

- Questions addressed in the evaluation
- Evaluation objectives
- Evaluation design
- Evaluation results
- Analysis of the data
- Recommendations regarding the program

Using Consultants Effectively

And finally, to gain maximum benefit from the consultant/client relationship, the client needs to know how to use the consultant to greatest advantage. The following guidelines serve to enhance and improve the capacities of those involved in TA programs so they may work more efficiently and effectively with colleagues (Hartman and Mundel 1980):

Reasons for Using A Consultant

1) You need something done that your staff can't do.
2) You need something done that you or your staff don't want to do.
3) You need an objective opinion.
4) You need extra credibility or prestige.
5) You don't know what to do; serious communication problems exist within your organization.

Reasons for Not Using a Consultant

1) The agency has not clearly defined the reasons for wanting a consultant.
2) The staff will be threatened by the intervention of a consultant.
3) No prior efforts have been made to solve the problem internally.
4) The consultant is expected to assume the function of a staff member.
5) Other resources have not been explored.
6) The organization has no intention of implementing the consultant's recommendations.

Selecting a Consultant

1) Ask for experience or a credibility statement.
2) Ask for names of former clients.
3) Ask for copies of training materials.
4) Talk to the consultants to see if they're what you want.
5) Try the consultant out for a few days before making a long-term contract.

Preparing for Arrival of a Consultant

1) Give the consultant information on previous attempts to solve the problem, a description of the program and what outcomes are expected.
2) Provide demographic data, statistical data, organizational by-laws.
3) Provide a set of measurable goals and activities (if the organization has one).

4) Develop some criteria within the organization for using consultants.

5) Prepare the staff.

6) Explain expectations to the consultant in writing, including:

- Projected timetable
- Number of working days and/or description of end results
- Reporting procedures
- Who does what

Some Ways to Use a Consultant

1) In a problem solving session with staff members

2) As a Board orientation

3) In small group sessions

4) To review the organizational structure

5) For individual, one-on-one activities

How to Recognize an Effective Consultant

1) The consultant will describe what methods will be used and why.

2) The consultant will describe how the curriculum will be used.

3) The consultant will describe what the participants will be able to do after the training.

4) The consultant will describe what skills will be used other than lecture and discussion.

5) The consultant will work with behavioral objectives.

6) The consultant will be able to explain the methods used for implementing the training and why.

7) The consultant will design evaluation tools to determine if the objectives have been met.

The contents of this study, in two parts, have revolved around the three major goals of technical assistance: 1) to solve the client's problem or satisfy the client's need, 2) to develop the client's internal capacity, and 3) to assist the client in becoming more skilled in using TA systems in the future. Underlying these goals is the basic tenet of effective technical assistance--the transfer of knowledge and skills in the most rapid, effective and efficient manner possible.

V. BIBLIOGRAHPY

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APPENDIX A

TECHNICAL ASSISTANCE AGREEMENT

ID:

Priority Number _____

PROJECT NAME: _____ DATE: Dec. 20, 1979

ADDRESS: _____ (City) _____ (State)

NEED: Assistance in developing a preschool assessment model and guidelines which address the issue of non-discriminatory assessment

TARGET: SEA-Early Childhood Staff

FOCUS OF TECHNICAL ASSISTANCE: Product Development

Technical Assistance Objectives	Technical Assistance Activities	Technical Assistance Documentation
1.0 By August 1, 1980, the SEA will have developed state guidelines for a preschool non-discriminatory assessment model.	1.1 By February 28, 1980, TADS will provide SEA with written examples of non-discriminatory diagnostic/assessment models. 1.2 By March 15, 1980, TADS will support one consultant for up to two days to: a) discuss models on non-discriminatory testing, b) assist in conceptualizing a non-discriminatory preschool assessment model, and c) serve as a resource in developing guidelines. (TADS pays 2 days fees, per diem and travel). 1.3 By June 10, 1980, TADS will support one SEA-Early Childhood Staff member for two days to visit a program implementing a preschool non-discriminatory assessment process. (TADS pays travel and per diem). 1.4 By July 1, 1980, SEA will prepare a draft of assessment guidelines and will send guidelines to consultants. 1.5 By July 15, 1980, TADS will support one consultant for one day to review and critique guidelines. (TADS pays for one day of fees). 1.6 By August 1, 1980, SEA will send completed time draft of guidelines to TADS.	1.1 The SEA and consultant will fill-out an evaluation questionnaire on the consultation and return it to TADS. 1.2 The SEA will fill-out an evaluation questionnaire on the site visit and return it to TADS. 1.3 The consultant will send SEA and TADS a written review and critique.

SOURCE: Clifford, Richard, and Pascal L. Trohanis (eds.). Technical Assistance in Educational Settings. Columbus, Ohio: The Ohio State University. 1980.

Appendix B

Critical Decisions in Six Consultative Phases

Following is a list of critical decisions a consultant must make in each of six consultative phases. Honest, objective responses to each question help to build mutual trust and respect.

PHASE 1. INITIAL CONTACT AND ENTRY

Critical Intervention Questions

1) How can I legitimize for clients their sharing of pain, problems, and sense of failure without also stimulating their defensiveness?

2) How can I ask probing questions and not mobilize feelings of irritation and hostility toward me?

3) How can I listen to and encourage the unloading of problems without appearing to accept the projections of blame and the attributions of causation of the exposed problems?

4) How can I demonstrate expertness and establish my credibility as a potential source of help without creating dependency and an expectation that I will solve the problem?

5) How can I explain readiness to work on change without appearing to assume (before diagnosis) that a lot of change is going to be needed?

6) How can I bring up and explore questions of compatibility without sounding too clinical, doubtful, or demanding?

7) How can my relevant experience and training be communicated without sounding like a sales pitch?

8) How can I be reassuring without being interpreted as saying the problem is minor or can be easily and quickly solved?

PHASE 2. FORMULATING A CONTRACT, ESTABLISHING A WORKING RELATIONSHIP

Critical Intervention Questions

1) How can I explore potential traps and misunderstandings with clients without appearing negative or disturbing?

2) How can I strike a balance between making clients' responsibilities and commitments seem too heavy (at this early

stage) and letting them make false assumptions about the amount of work that will be expected by the consultant?

3) How can I find some ways to test compatibility and skills of collaboration without entering into some irreversible commitments?

4) How can I be clear about the level of my commitment of time and energy without appearing to sell myself or have inflexible standards?

5) How can I clarify some limitations of my resources without creating loss of confidence in me?

6) How can I realistically communicate my available time and energy without discouraging the client?

7) How can I work for involvement of appropriate parts of the system without antagonizing the in-group?

8) How can I stretch the necessary time perspective of the contract without appearing to promote more work for myself?

9) How can I write the commitment about the participation of top management without creating defensiveness and gameplaying?

10) How can financial terms be definite and yet flexible in response to changes in conditions, e.g., new critical problems discovered, basic conflicts to be handled?

11) How can we define outcomes and accountability to be derived without creating traps and limitations?

12) How can division of labor be defined without too much rigidity and without scaring people?

PHASE 3. PROBLEM IDENTIFICATION AND DIAGNOSIS

Critical Intervention Questions

1) How can I get people to open up and question their assumptions about the causes of their problems?

2) How can I get them to accept the need for objective fact finding to supplement their own data assumptions?

3) How can I introduce perspective about the time that is needed without discouraging them?

4) How can I obtain their appropriate understanding and commitment of the time and energy that will be required of them?

5) How can I involve them enough in the diagnostic data-collection process for them to feel ownership of the data and accept its validity?

6) How can I arrange for the appropriate parts of the client system to review the data and draw implications for action?

7) How can I focus on data about need and readiness for change, rather than simply working on causes of the pain or the problem?

PHASE 4. GOAL SETTING AND PLANNING

Critical Intervention Questions

1) How can I create a psychological readiness in people to think into the future and freely imagine alternative futures?

2) How can I free them enough from inhibiting assumptions about adjusting, predicting, and feasibility to project a desired future based on their values?

3) How can I prevent them from choosing goals before they have tested alternatives for probable consequences?

4) How can I confront the tendency to involve too few members of the system in goal setting and planning?

5) How can I press for concreteness and measurability in goal statements without evoking a negative reaction?

6) How can I stimulate interest in step-by-step goal planning in place of a preoccupation only with big, long-term perspectives?

7) How can I support planning for evaluation as part of planning for implementation?

8) How can I help with reality testing of plans?

9) How can I help clients to explore the possible side effects and traps that are part of planning?

10) How can I push for personnel commitments of time, effort, and acceptance of deadlines without creating resistance and flight?

11) How can I stimulate clients to consider the need for and use of resources beyond themselves?

12) How can I plan for my withdrawal and the development of internal resources to replace my functions?

PHASE 5. CONVERTING PLANS INTO ACTION

Critical Intervention Questions

1) How can I present to clients the necessity and value of action rehearsal so that it will be accepted?

2) How can I present and demonstrate the value of skill training?

3) How can I demonstrate and communicate the details of effective involvement, briefing techniques, and preparation for all implementation actions as replacements for the assumptions that good intentions and acceptance of goals are adequate?

4) How can I confront the weakness of an authoritative strategy with a process based on voluntary involvement?

5) How can I deal with the dependency of clients who want me to use my expertness to produce the action?

6) How can I introduce procedures for obtaining feedback on each action step and for using the data?

7) How can I support the use of other resources as an evidence of strength rather than weakness?

8) How can I introduce and support celebration of milestones of progress?

9) How can I help those who are taking action to understand the idea and the use of support systems and to use each other for support, reinforcement, and debriefing?

10) How can I support the commitment to document the action and the consequences?

PHASE 6. CONTRACT COMPLETION: CONTINUITY AND SUPPORT

Critical Intervention Questions

1) How can I deal objectively with my own conflicting inclinations to see "all the help the clients still need" and also to move on to do "new and exciting things"?

2) How can I involve the client in setting goals that increase self-direction and internal support?

3) How can I make appropriate commitments for periodic support as needed?

4) How can I confront and support the need for specific deadlines on progress checkpoints, the need for renewal, and other items?

5) How can we find ways to provide support from a distance?

6) How can I support continuing plans for documentation and evaluation?

7) How can I support plans for continuing internal personnel development and internal change-agent functions?

8) How can I help to clarify the client's understanding of ongoing and potential needs for external help and appropriate procedures for securing such help?

9) How can we appropriately celebrate the completion of our contract?

Source: Lippitt, Gordon and Ronald Lippitt. The Consulting Process in Action. University Associates Inc., La Jolla, CA, 1978.

Appendix C

Steps in Developing a Change Model

The construction of a two-dimensional graphic-schematic model requires specific, orderly steps. While these steps have chronological implications, it is not critically necessary that the sequence of presentation below be exactly followed:

STEP NO. 1

Prepare a description of the situation or system under study and identify the essential variables which can influence that situation or system. For each variable the following data should be listed:

Relevance. All variables which might have an important effect on the intended change should be listed and where there is some possibility of confusion, they should be carefully defined.

Relationships. Indicate how these variables interrelate with each other. This is an extremely important aspect of a model and yet it is often overlooked.

Relative Importance. Weight the variables--graphically, numerically, by precedence, or however--according to the effect they might exert with respect to the intended change. For example, in Lewin's force field analysis model, the relative importance of the variables is given by the length of arrows.

Quantitative Relationships. Quantitative relationships between variables often cannot be determined but when available, these should be included in the list.

Outside Constraints. This is sometimes referred to as the boundary of the problem. Not only should the limits of the analysis be shown but also any outside forces which act upon (or limit) the situation or system should be identified.

Internal Constraints. These are generally limitations which arise out of the nature of the system or situation, or problem being studied. For instance, certain procedures may have to follow prescribed patterns. These should be included in the data.

STEP NO. 2

Establish the symbols to be used. It really makes little difference what symbols are used as long as they are commonly and correctly understood by all who are to use or be affected by the model.

STEP NO. 3

Analogies should be developed. At this stage of the model-building process, using available data and the fully identified variables, the model-builder should try to develop an analogy between the change problem under consideration and some previous experience. Such an analogy will sometimes occur intuitively. Is this a change problem to which a confrontation method might be appropriate? Is this change situation similar to one that is modeled by someone else? Is this change situation similar to one I encountered previously? Does this change situation lend itself to a collaborative effort? These and other questions can make possible analogies that might be considered in the analysis of a situation. Such analogies may well suggest the way in which the change situation might be approached. The process of discovering analogies is not easy or well understood. It is, however, an important part of being able to "picture" the model in a helpful way.

STEP NO. 4

Establish criteria for measurement of the effectiveness of a change process. An essential early step in the modeling process would be the development of a clear statement of the criteria used to judge the success of a change endeavor. Do you want the model to predict the consequences of various interventions? Do we want the model to suggest an optimal solution to the problem? Is the model going to be successful if a certain quantitative measure of change is achieved? Some reality of the measure of effectiveness of a change endeavor is necessary for us to be able to make a model. Such a statement of objectives would provide the criteria for determining the success of a change enterprise. In establishing such an objective, however, one should keep open the possibility that it might prove unachievable or that different objectives may occur after the process of change is initiated. This might mean that the model should have certain feedback loops to provide for substitute goals, if such should occur.

STEP NO. 5

Determination of the values of subparts of the change problem. A change model should be made up of simple parts where the values of those parts (whether they be factors, variables, or subachievements) can be determined. When we are able to understand the subparts of a problem or a change endeavor, it is easier to subsequently combine these into a total client system change model.

STEP NO. 6

Identify alternatives and looping relationships. Make the model dynamic, if at all possible. This requires examining the interrelationship of different parts of the problem and introducing input/output loops that

might affect the model. This done, it should be possible to envision how an intervening action might effect the change phenomenon, or the predicted result of alternative action. The identification of the alternative courses of action is a primary benefit to be gained from an appropriately developed model.

STEP NO. 7

Validate the model empirically. Until such validation is performed, the model represents the model-builder's concept of a system or situation, but nothing more. It might be tested in consultation with the people involved, by comparing it with another model independently prepared, or by applying it to the real world situation or system through simulation or role playing.

Source: Lippitt, Gordon. Visualizing Change. NTL-Learning Resources, Inc., 1973.

Appendix D

Use of Symbols in Model Building

Though there are no widely accepted, standarized symbols for use in creating models for change, the following experimental set of guidelines might be acceptable for standard usage.

RECTANGLE:

Represents an entity; size of rectangle represents relative value; horizontal or vertical position of rectangle indicates comparative relationships.

CIRCLE:

Represents commonality; i.e., shared functions, attitudes, skills, values, environment; size of circle represents relative value; horizontal or vertical position of circle represents comparative relationships.

TRIANGLE:

Represents focus or focal point; i.e., convergence of change factors; equilibrium; fulcrum (leverage); center of balance.

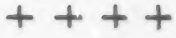
or

represent direction of flow

SOLID LINE: Represents direct connection; i.e., authority, influence, fusion

BROKEN LINE: Represents indirect connection; i.e., liaison, cooperation, support, influence

Nonconcurrency: i.e., direct or passive resistance, disagreement, rebellion



Concurrency: i.e., direct or passive agreement, assistance, support

(−)	Negative
(+)	Positive
	Indecision
	No position
	Neutrality
	Dominant entity or commonality
	Coordinating entity or commonality
	Convergence of interest, concern, or common values
Letters	(upper case) to be used for identification of entities or commonalities
Letters	(lower case) to be used, when necessary, to indicate sequence
Numerals	(arabic or roman) to be used to indicate values or relative weights

Source: Lippitt, Gordon. Visualizing Change. NTL-Training Resources, Inc., 1973.